



**UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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WM02/1205

EXAMINER

CHIANG, J

ART UNIT

PAPER NUMBER

2642

DATE MAILED:

12/05/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/125700

Applicant(s)

Fuhrmann et al

Examiner

J. Chiang

Group Art Unit

2642

#6

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3- MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 9-18-00.
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-9, 11-13, 15-16 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-9, 11-13, 15-16 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

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**CLAIMS**

**112-rejection**

1. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 is depending from a canceled claim 10.

(Note: rejection is made based on the assumption that claim 12 is depending from claim 1).

**Art-rejection**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 11-12, 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomura et al (US 5357570)

Regarding claim 1, Tomura shows a phone comprising:

a first housing (2b);

a second housing (2a);

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at least one key unit (28);

at least one key sensor (square area on 22);

retaining means comprising a cover (22) for holding electronic components, including said key sensor (with 22) but excluding said key unit (28), to the first housing (2b) when the second housing (2a) is released from the first housing (2b);

the key unit (28) is free to move with respect to the first housing (2b) when the second housing (2a) is removed from the first housing (2b).

Regarding claim 15, Tomura shows a phone comprising:

a back housing (2b, see 18) providing at least one key sensor (with 22);

at least one key unit (28);

a front housing (2a) providing at least one opening (see 16);

retaining means comprising a cover (i.e. 22) for holding electronic components to the first housing (2b) when the front housing (2a) is released;

the front housing (2a) is attached to the back housing (2b), the key unit (28) is held between the front housing (2a) and the key sensor (on 22), and the key unit (28) is received in the opening (see 16);

the key unit (28) is free to move with respect to the first housing (2b) when the second housing (2a) is removed from the first housing (2b).

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Regarding claim 16, Tomura shows a phone comprising:

a first housing (2b);

a second housing (2a);

at least one key unit (28);

at least one key sensor (square area on 22);

retaining means comprising a cover (22) for holding electronic components to the first housing (2b) when the second housing (2a) is released from the first housing (2b);

the second housing (2a) is attached to the first housing (2b), the key unit (28) is held between the second housing (2a) and the key sensor (on 22),

the key unit (28) is free to move with respect to the first housing (2b) when the second housing (2a) is removed from the first housing (2b).

Regarding claims 2-9, 11-12, Tomura shows:

the second housing which is a user interface (2a);

a circuit board (see 22, 26, circuit board within 20);

the at least one key sensor (on 22);

the component and its location ( between 22 and 26);

the cover (i.e. 22) is releasable with respected to the circuit board (i.e. 20, 26);

at least one aperture and at least one user interface component (i.e. mounting of 40 and 24) is

retained by the cover (22);

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a sealing member (see 20)

the key unit (28) is sandwiched between the second housing (2a) and the key sensor (on 22);

the key unit (28) is a key mat.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tomura in view of Takagi et al. (US 5235636).

Regarding claim 13, Tomura shows the key unit and key sensor (see comments on claim 1); Tomura differs from the claimed invention in that it does not explicitly mention that the key sensor is the type of membrane switch.

However, it is notoriously well known that membrane switch is used as key switch (sensor) in keypad, especially in the cell phone environment. This is shown by Takagi (46, 50). Hence, if it is found that Tomura's key switch is not the well known membrane switch, then it would have been obvious for one skilled in the art to adapt Takagi's membrane key switch in Tomura, this is because such membrane key switch is one of the most common and widely used in the cell phone keypad environment and it is well known in the art.

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**REMARKS**

4. In response to the remarks, pages 4-6, in view of the newly submitted and amended claims and argument, it is believed that Tomura and its combination would meet all the claimed limitations, see rejection above.

5. Applicant's arguments with respect to claims 1-9, 11-13, 15-16 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Chiang whose telephone number is (703) 305-4728. The examiner can normally be reached on Mon.-Fri. from 9:30 to 6:00.

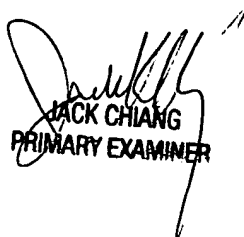
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on (703) 305-4731. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

J. Chiang

November 29, 2000

  
JACK CHIANG  
PRIMARY EXAMINER